

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-5. (Canceled).

6. (Currently Amended) A method of controlling a door of a drum type washing machine, the method comprising the steps of:

sensing a water level in a washing tub using a sensor coupled to the washing tub;

comparing in a controller of the washing machine the sensed water level to a reference water level previously stored in the controller; and

locking or unlocking the door ~~according to~~ based on a result of the comparing step.

7. (Currently Amended) The method as claimed in claim 6, wherein locking or unlocking the door comprises locking the door is locked if when the sensed water level is higher than the reference water level, and ~~wherein unlocking the door is unlocked if when~~ the sensed water level is lower than the reference water level.

8. (Currently Amended) The method as claimed in claim 6, further comprising ~~the step of~~ displaying a lock/unlock status of the door on a display portion of the washing machine.

9. (Currently Amended) The method as claimed in claim 6, further comprising the ~~step of checking~~determining whether power is applied to the washing machine using the controller and its operable coupling to a plurality of functional elements of the washing machine prior to sensing the water level in the tub.

10. (Currently Amended) The method as claimed in claim 9, ~~wherein if the~~ further comprising locking the door when it is determined that power is not applied, the door is locked and wherein if the power is applied, it is checkeddetermining whether the washing tub is rotating when it is determined that power is applied.

11. (Currently Amended) The method as claimed in claim 10, ~~wherein if~~further comprising locking the door when it is determined that the washing tub is rotating, ~~the door is locked and wherein if~~performing the sensing step when it is determined that the washing tub is not rotating, ~~the water level in the washing tub is sensed.~~

12. (Currently Amended) The method as claimed in claim 9, ~~wherein if the~~further comprising locking the door when it is determined that power is not applied, ~~the door is locked and wherein if the power is applied, the water level in the washing tub is sensed~~ performing the sensing step when it is determined that power is applied.

13-15. (Canceled).

16. (Currently Amended) A method of controlling a door of a drum type washing machine, the method comprising the steps of:

Receiving, in a controller which is operably coupled to a plurality of functional elements of the washing machine, a user's command for opening to open the door;

checking/determining whether a power is applied to the washing machine using the controller and its operable coupling to the plurality of functional elements;

unlocking the door if ~~the~~when the controller determines that power is not applied or checking, and determining whether water exists is present in a washing tub if ~~the~~of the washing machine when the controller determines that power is applied using a water level sensor coupled to the controller;

unlocking the door if ~~the water fails to exist~~when the controller determines that water is not present in the washing tub or, and sensing a water level in the washing tub if ~~the water exists~~using the water level sensor operably coupled to the controller when the controller determines that water is present in the washing tub; and

locking or unlocking the door according to based on the sensed water level.

17. (Currently Amended) The method as claimed in claim 16, wherein locking or unlocking the door comprises comparing, in the controller, the sensed water level is compared to

a reference water level previously stored in the controller to determine whether to lock or unlock the door.

18. (Currently Amended) The method as claimed in claim 17, ~~wherein further~~ comprising locking the door is locked if when the controller determines that the sensed water level is higher than the reference water level, and wherein unlocking the door is unlocked if when the controller determines that the sensed water level is lower than the reference water level.

19. (Currently Amended) The method as claimed in claim 16, further comprising the ~~step of displaying a lock/unlock status of the door~~ on a display portion of the washing machine.

20. (Currently Amended) The method as claimed in claim 16, further comprising the ~~step of checking checked~~ determining whether the washing tub is rotating if the using a motor sensor operably coupled to the controller when the controller determines that power is applied.

21. (Currently Amended) The method as claimed in claim 19, ~~wherein if further~~ comprising locking the door when the controller determines that the washing tub is rotating, the door is locked and wherein if the washing tub is not rotating, sensing the water level in the washing tub is sensed using the water level sensor when the controller determines that the washing tub is not rotating.

22. (New) The method as claimed in claim 6, wherein the reference water level is a level which is above a bottom of the washing tub and less than or equal to a bottom of the door.

23. (New) The method as claimed in claim 17, further comprising draining water in the washing tub to less than the reference water level and thereafter unlocking the door when the controller determines that the sensed water level is higher than the reference water level.

24. (New) The method as claimed in claim 17, wherein the reference water level is a level which is above a bottom of the washing tub and less than or equal to a bottom of the door.